



Maneuver Conference 2011:

21st Century Maneuver Training

Fort Benning, Home of the MCoE



Future Operational Environment

Military Power in the 21st Century will be defined by our ability to adapt

Ambiguity

Location, Adversaries, Context, Duration



Increased Competition



Rising powers, organized militias, technology as a leveler

Adaptive, technologically enhanced threats



Dynamic combinations of conventional, irregular, terrorist and criminal capabilities



Exponential, not Arithmetic



Decentralization
Networked Forces, Dispersed Among the People

" We now know more, but this makes us more, not less uncertain. The latest reports do not arrive all at once: they merely trickle in. They continually impinge on our decisions, and our mind must be permanently armed, so to speak, with them." Clausewitz *On War*

The Modern Fog of War



Information overload



UAS Feed VIA
OSRVT



State Department, Law
Enforcement, Human Terrain
Teams



SIGINT, OGA's, Joint
Sensors



RTE Clearance



Human Intelligence
THT and COIST
feedback



AWT



Patrols



Host Nation Forces

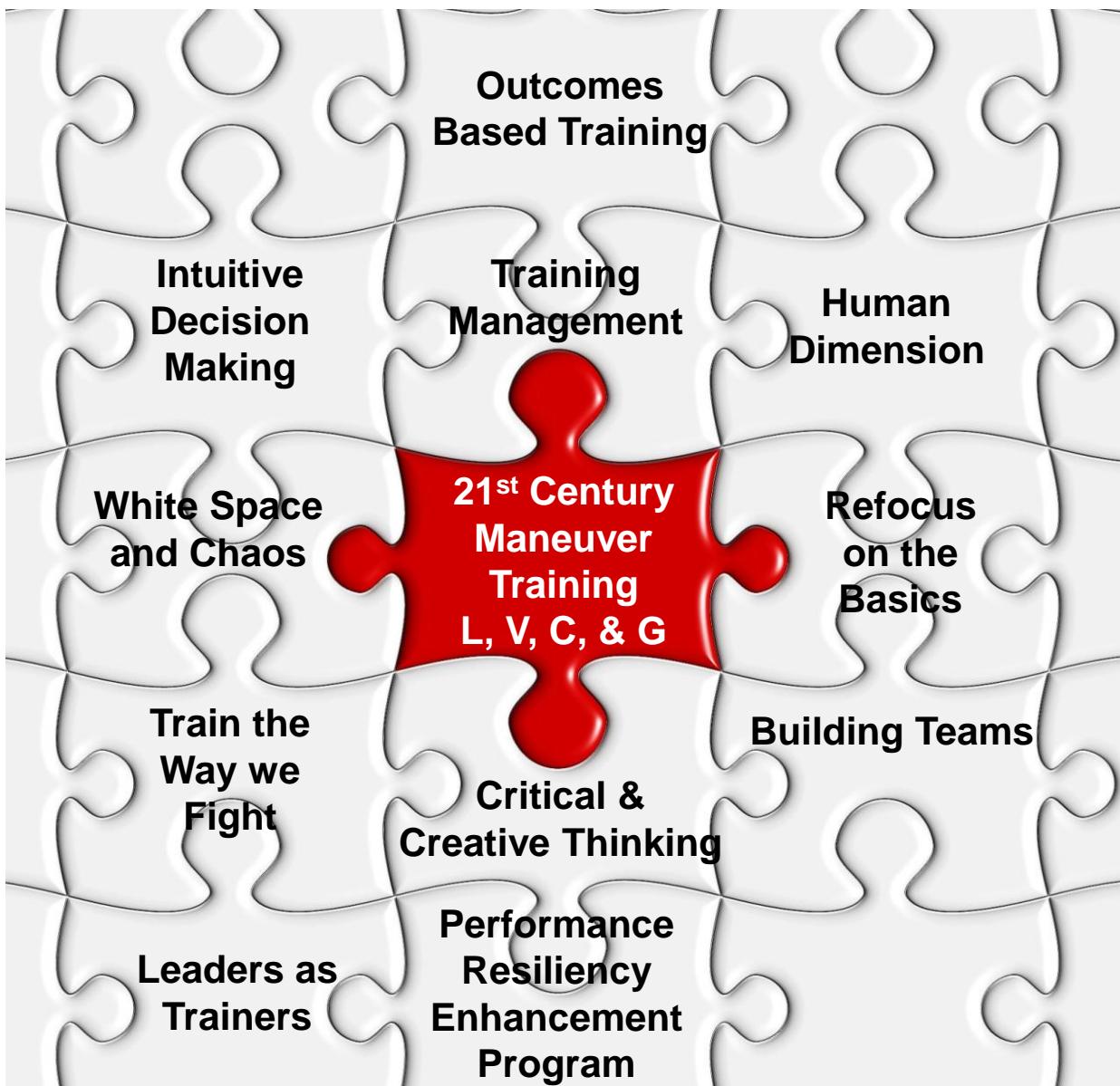


Civil Affairs,
PSYOPS, THT, NGO's

"War is the realm of uncertainty; three quarters of the factors on which action in war is based are wrapped in a fog of greater or lesser uncertainty. A sensitive and discriminating judgment is called for; a skilled intelligence to scent out the truth."
Clausewitz, *On War*



Pieces of the Training Puzzle



We Do NOT Train the Way We Fight

- **Difficult to replicate the COE- Cannot get the complexity in one environment**
- **Complex environment- Fusion, HUMINT, SIGINT, Lethal and Non-lethal effects based targeting**
- **JIIM environment: Stove piped within organizations, Little to no interagency training prior to deployment or at CTC's. 100's of Enablers: for example, PRT's, USAID, DIA, FBI, CIA, SOF, ISR, HUMINT, SIGINT, PSYOPS, CA, and Joint Sensors.**
- **90% of our time spent training 10% of what we use in combat.**
- **LIVE is still critical.**
- **Live, Virtual, Constructive, and Gaming—MUST be easier to develop, duplicate environment, and execute.**



State Department



PRT's



FBI



DIA



Army Training in the 21st Century

Changes NEXT EXIT ➔

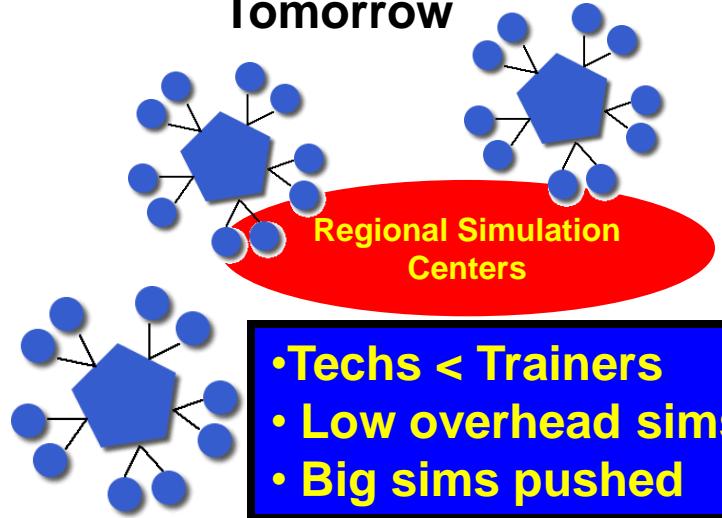
Enable Commanders

Today



- Techs > Trainers
- Full suites L, V, C, G
- Stovepiped
- No fair fight
- As required
- Live preferred

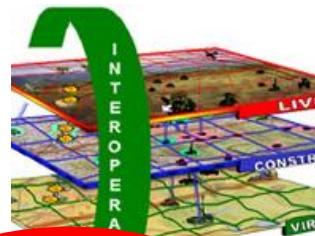
Initiatives



Tomorrow

Regional Simulation Centers

- Techs < Trainers
- Low overhead sims
- Big sims pushed



Integrated Training Environment

- 24 X 7
- Incremental builds
- World-wide
- Fair fight
- Credit for sims
- COTS/GOTs



Regional Collective Training Capability

- < 250 miles
- 27 sites
- Tailored

Framework for Army Training and Education

Today



Training
Brain

Op Env: PMESII-PT

Use &
Reuse

Common Framework
of Scenarios



Training database



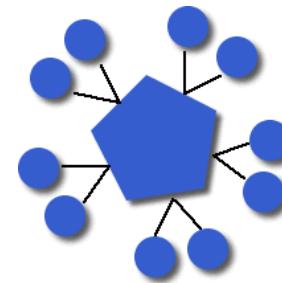
Replicate incidents
from theater



Tomorrow



Cdr's Interface



Networked across
domains

Training Support
Packages



Leverage Technology

Revise Concepts every 2 yrs

- Acquisition: 5-7 yrs
- Org Design: 5 yrs
- *Doctrine, Leader Dev, Unit Training: 1-2 years*

CBAs, Strategies,
Master Plans &
JCIDS



Testing &
Experimentation for
Training & Leader
Development



Virtual
Credit



Massive
Multiplayer
Online
Gaming



GOTS
& COTS



Virtual
Humans

Bringing a Blended Training Model to the Institution

Blurring Lines Between Generating & Operating Force

CoE CCC Ldr Dev Ex (VBS2)



- CFoS & Training Brain
- Linking CoEs in virtual environment

Point-of-Need Learning 24x7



- Persistent Learning Capability
- Performance Support Apps
 - Goal Setting
 - M4 Zero

Massive Multiplayer Online Gaming

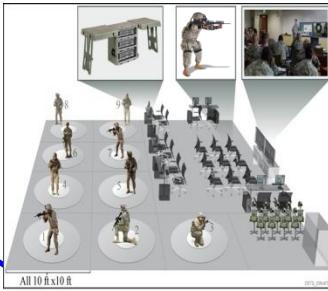


Enhanced Geosocial Dynamic Environment



- Virtual world that replicates OE
- Allows for Human Dimension aspects
 - Culture
 - Group Dynamics
 - Human Networks

Immersive Squad Trainer (Dismounted Soldier)



- Multiple repetitions
- Scalable complexity
- Replicate OE

Virtual Humans

- Soldier issued avatar for virtual worlds
- Intelligent, interactive avatars



Virtual Credit

- Marksmanship & Gunnery Training Strategies
- Gated Training Strategies (e.g. non-stabilized gunnery AoA)



Blended Training Model

Live



Virtual



Repetition/Immersion



Constructive

Gaming

VBS2